**SPERC factsheet – *Use as a Fuel – Wide dispersive use (Solvent-borne)***

|  |  |
| --- | --- |
| **General Information** | |
| **Title of Specific ERC** | Use as a Fuel (wide dispersive use): solvent-borne |
| **Applicable ERC** | 9a – Wide dispersive indoor use in closed systems; 9b – Wide dispersive outdoor use in closed systems |
| **Responsible** | ESIG/ESVOC |
| **Version** | V1 |
| **Code** | ESVOC 9.12b.v1  ESVOC 9.12c.v1 |
| **Scope** | Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste and consumer uses in liquid fuels.  *Substance Domain*: Applicable to petroleum substances (e.g., aliphatic and aromatic hydrocarbons) and petrochemicals (e.g., ketones, alcohols, acetates, glycols, glycol ethers, and glycol ether acetates).  *Size of installation*: Applicable to professional and consumer use with an assumed use rate of 0.05% of regional tonnage  *Processing conditions*: Some disposal via wastewater assumed |
| **Coverage** | Professional Uses (Process Categories): 1 (use in closed process, no likelihood of exposure), 2 (use in closed, continuous process with occasional controlled exposure), 3 (use in closed batch process (synthesis or formulation)), 8a (transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities), 8b (transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities), 16 Using material as fuel sources, limited exposure to unburned product to be expected  Consumer Uses (Product Categories): 13 Fuels |

|  |  |  |
| --- | --- | --- |
|  | **Characteristics of specific ERC** | **Type of Input Information** |
| **Operational Conditions** | Indoor use/outdoor use. Solvent-based process/product. Professional and consumer product use leading to emission of volatiles to air. Professional and consumer product use leading to disposal via the wastewater. |  |
| **Obligatory onsite RMMs** | No obligatory onsite RMMs assumed |  |
| **Substance Use Rate** | 0.05% (no geographical or temporal peaks in use) of Regional Tonnage based on default standard town population of 10000 inhabitants. | Default approach of the REACH guidance1 |
| **Days Emitting** | 365 days/year | Default approach of the REACH guidance1 |
| **Environmental Parameters for Fate Calculation** | Assumed dilution factor in freshwater is 10. For marine assessments an additional tenfold dilution is assumed, i.e., dilution factor in marine water = 100. | ERC default settings2 |

1ECHA Guidance on information requirements and chemical safety assessment, Chapter R.16: Environmental Exposure Estimation, Section R.16.3.2

2ECHA Guidance on information requirements and chemical safety assessment, Chapter R.16: Environmental Exposure Estimation, Section R.16.6.3

<http://echa.europa.eu/documents/10162/17224/information_requirements_r16_en.pdf>

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Characteristics of Specific ERC** | | **Justification** |
| **Emission Fractions** | ***To Air***  VP > 5000 Pa  VP 500-5000 Pa  VP < 500 Pa | ***f* (vapor pressure)**  0.01  0.001  0.0001 | Emission factors based on calculated losses for petrol, kerosene and diesel fuels during professional and consumer use (CONCAWE personal communication). |
| ***To Municipal Wastewater/Sewer/ Water courses*** | 0.00001 |  |
| ***To Soil*** | 0.00001 |  |

|  |  |  |
| --- | --- | --- |
|  | **Type of RMM** | **Typical Efficiency** |
| **Appropriate Risk Management Measures (RMM) that may be used to achieve required emission reduction** | ***Air*** | |
| *Local/Onsite Technology* | Professional and Consumer product use with limited or no technical control of emission. |
| ***Water*** | |
| *Offsite Technology*  Municipal wastewater treatment plant | The removal efficiency of a sewage treatment plant can be estimated. The standard estimation is via the SimpleTreat module of EUSES or ECETOC TRA.  \*Specific substance efficiency calculated via SimpleTreat and is assumed to represent default removal efficiency. |
| *Local/Onsite Technology* | Professional and Consumer product use with limited or no technical control of emission. |

|  |
| --- |
| **Safe Use** |
| **Communication in SDS**  The REACH registrant establishes a set of standard conditions of safe use for a substance (for wide dispersive use of a solvent-borne processing aid) by adopting the conditions specified in this SPERC and recommending a Required Removal Efficiency (RRE) for adequate risk reduction. If RRE = 0, wastewater emission controls (beyond those specified by the operational conditions) are not required to ensure safe use of the substance. If > 0, the RRE may be achieved via offsite municipal sewage treatment (providing substance removal efficiency, REOffsite).  Removal efficiency requirements, as dictated by the assumed operating conditions, are documented in the Chemical Safety Report and communicated in the Safety Data Sheet. All other parameters underlying a substance exposure scenario based on the SPERC ‘Use as a fuel – wide dispersive use (solvent-borne)’ are implicitly referred to via the reference to this SPERC.  **Scaling**  Not applicable for wide dispersive uses. |

### ESVOC 9.12.b-c.v1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Determinant Label** | **Quali-/ Quanti-tative** | **Value** | **Description of Value** | **Exposure route** | **Use conditions worker** | **Use condition consumer** | **Standard Phrase** |
| Indoor/Outdoor use | Qual | Covers Indoor and Outdoor use |  | Air/ water/ soil | e-w-3 | e-c-4 | Same as ‘value’ |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |